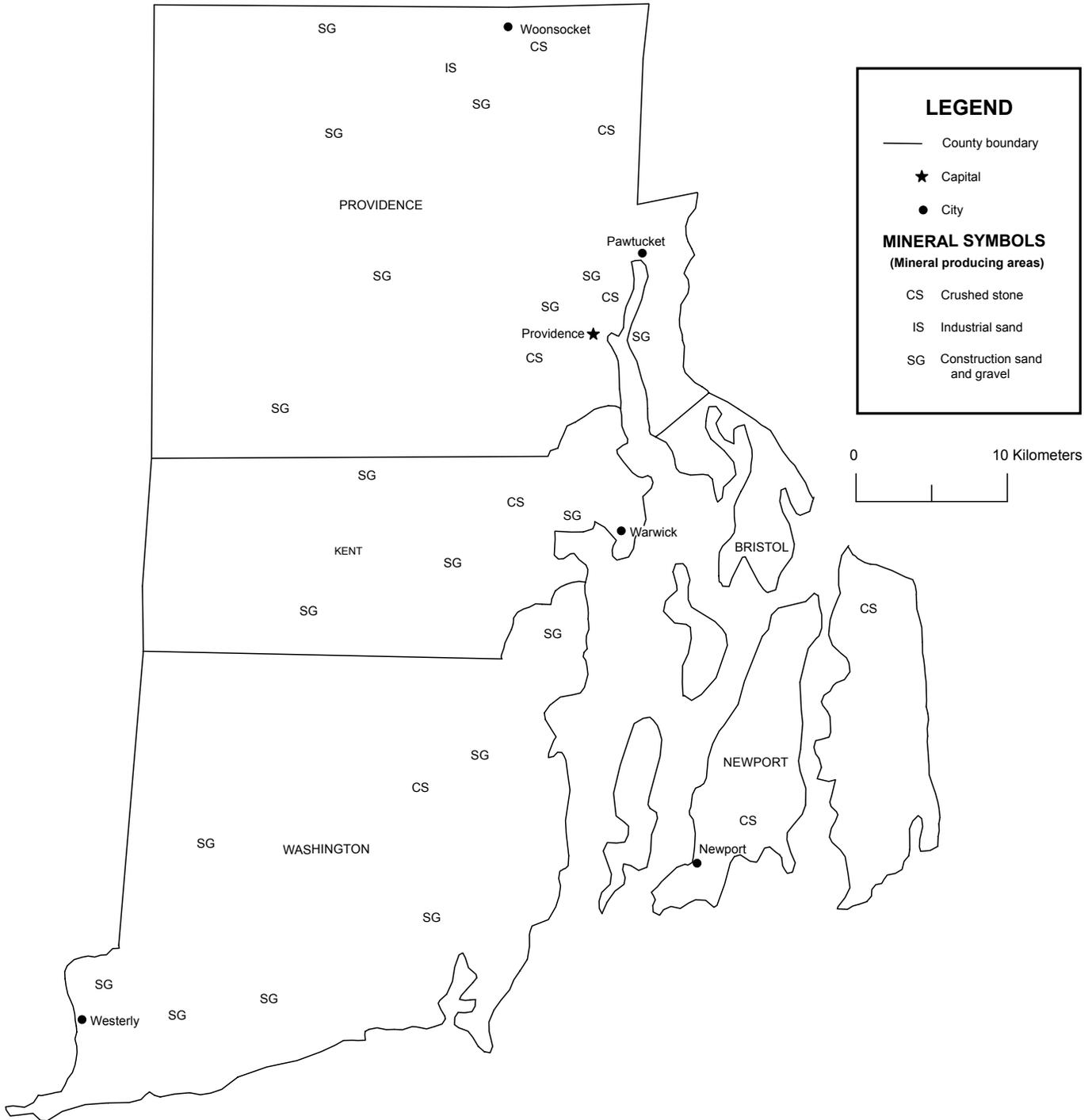


# RHODE ISLAND



# THE MINERAL INDUSTRY OF RHODE ISLAND

**This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Rhode Island Geological Survey for collecting information on all nonfuel minerals.**

In 2004, Rhode Island's nonfuel raw mineral production was valued<sup>1</sup> at \$34.4 million, based upon annual U.S. Geological Survey data. This was an increase of 8.5% from the State's total nonfuel mineral value for 2003,<sup>2</sup> which was up about 24% from 2002. (The data for industrial sand and gravel are withheld in table 1 to avoid disclosing company proprietary data; the actual total values for 2002-04 are higher than those reported in that table.)

Most of Rhode Island's nonfuel mineral production resulted from the mining and production of two basic construction materials—construction sand and gravel and crushed stone. In 2004, these two mineral commodities accounted for about 64% and 36%, respectively, of that portion of the State's nonfuel mineral economy that may be publicly disclosed. Each of the leading mineral commodities increased in value in 2004; crushed stone rose by \$1.7 million and construction sand and gravel increased by \$1 million. With a relatively small increase in production, industrial sand and gravel value also rose, by more than \$2 million. Gemstones continued to be mined in the State by hobbyists.

In 2003, construction sand and gravel led Rhode Island's increase in total nonfuel mineral value; production increased nearly 49%, resulting in an increase of \$7 million in the commodity's value from that of 2003 (table 1). This was offset slightly by a relatively small decrease in the value of crushed stone; industrial sand and gravel also had a small decrease in value for the year.

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<sup>1</sup>The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 2004 USGS mineral production data published in this chapter are those available as of December 2005. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—also can be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals>.

<sup>2</sup>Values, percentage calculations, and rankings for 2003 may differ from the Minerals Yearbook, Area Reports: Domestic 2003, Volume II, owing to the revision of preliminary 2003 to final 2003 data. Data and rankings for 2004 are considered to be final and are not likely to change significantly.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN RHODE ISLAND<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Mineral	2002		2003		2004	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones	NA	1	NA	1	NA	1
Sand and gravel:						
Construction	1,760	14,100	2,450	21,000	2,490	22,000
Industrial	157	( <sup>3</sup> )	W	( <sup>3</sup> )	W	( <sup>3</sup> )
Stone, crushed	1,780	11,400	1,340	10,700	1,600	12,400
Total	XX	25,500	XX	31,700	XX	34,400

NA Not available. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

<sup>1</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Value withheld to avoid disclosing company proprietary data.

TABLE 2  
RHODE ISLAND: CRUSHED STONE SOLD OR USED, BY KIND<sup>1</sup>

Kind	2002				2003				2004			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	1	W	W	\$3.97	1	W	W	\$6.65	1	W	W	\$6.65
Granite	5	W	W	6.70	4	W	W	8.05	3	W	W	8.60
Traprock	2	W	W	5.51	2	W	W	5.51	3	W	W	7.34
Total or average	XX	1,780	\$11,400	6.41	XX	1,340	\$10,700	8.00	XX	1,600	\$12,400	7.74

W Withheld to avoid disclosing company proprietary data; included in "Total or average." XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 3a

RHODE ISLAND: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2003, BY USE<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
<b>Construction:</b>			
<b>Coarse aggregate (+1½ inch):</b>			
Macadam	W	W	\$10.35
Riprap and jetty stone	W	W	15.43
Filter stone	W	W	10.59
<b>Coarse aggregate, graded:</b>			
Concrete aggregate (coarse)	W	W	10.75
Bituminous aggregate (coarse)	W	W	7.63
Bituminous surface-treatment aggregate	W	W	6.61
Fine aggregate (-¾ inch), stone sand (concrete)	W	W	4.39
<b>Coarse and fine aggregates:</b>			
Graded road base or subbase	W	W	9.18
Unpaved road surfacing	W	W	11.02
Crusher run or fill or waste	W	W	9.95
Other construction materials	372	\$3,560	9.56
Other miscellaneous uses and other specified uses not listed	1	3	3.00
Unspecified, estimated <sup>2</sup>	260	1,500	5.66
Total or average	1,340	10,700	8.00

W Withheld to avoid disclosing company proprietary data; included in "Total or average."

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Estimated production without a breakdown by end use.

TABLE 3b

RHODE ISLAND: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2004, BY USE<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
<b>Construction:</b>			
<b>Coarse aggregate (+1½ inch):</b>			
Macadam	W	W	\$13.71
Other coarse aggregate	43	\$451	10.49
<b>Coarse aggregate, graded:</b>			
Bituminous aggregate (coarse)	W	W	9.30
Bituminous surface-treatment aggregate	W	W	9.52
Fine aggregate (-¾ inch), bituminous aggregate (coarse)	W	W	5.19
<b>Coarse and fine aggregates:</b>			
Graded road base or subbase	W	W	7.28
Crusher run or fill or waste	W	W	8.76
Agricultural limestone	W	W	6.63
Other miscellaneous uses and other specified uses not listed	1	3	3.00
Unspecified, estimated <sup>2</sup>	840	6,200	7.37
<b>Total or average</b>	<b>1,600</b>	<b>12,400</b>	<b>7.74</b>

W Withheld to avoid disclosing company proprietary data; included in "Total or average."

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Estimated production without a breakdown by end use.

TABLE 4a  
RHODE ISLAND: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2003,  
BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate and concrete products <sup>2</sup>	838	\$7,250	\$8.65
Asphaltic concrete aggregates and road base materials	495	3,860	7.80
Fill	83	528	6.36
Snow and ice control	111	2,420	21.83
Other miscellaneous uses	32	229	7.16
Unspecified, estimated <sup>3</sup>	900	6,700	7.47
Total or average	2,450	21,000	8.55

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Includes plaster and gunite sands.

<sup>3</sup>Estimated production without a breakdown by end use.

TABLE 4b  
RHODE ISLAND: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2004,  
BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate and concrete products	715	\$6,230	\$8.71
Asphaltic concrete aggregates and road base materials	235	1,970	8.35
Fill	84	570	6.81
Snow and ice control	93	1,500	16.06
Unspecified, estimated <sup>2</sup>	1,400	12,000	8.63
Total or average	2,490	22,000	8.85

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Estimated production without a breakdown by end use.